ORDINANCE NO. 244

ORDINANCE AMENDING SECTION 6. OF ORDINANCE NO. 242, RELATING TO CERTAIN PROHIBITIONS ON THE USE OF WATER DURING WATER SHORTAGE EMERGENCY

BE IT ORDAINED by the Board of Directors of the Dublin San Ramon Services District, a public agency in the counties of Alameda and Contra Costa, California, as follows:

SECTION 1. Section 6 of Ordinance No. 242, entitled "Ordinance Determining and Declaring Water Shortage Emergency, Establishing Regulations and Restrictions on the Delivery and Consumption of Water, and Establishing Penalties for Violation Thereof", adopted June 4, 1991, is hereby amended to read as follows:

"Section 6. Prohibitions. (a) Stages I - IV. The following uses of Water are hereby determined and declared non-essential and are prohibited from and after notification of initiation of Water use reduction measures under Stages I - IV, inclusive:

- (1) Use of Water for flushing or washing streets (excluding such use with the operation of vehicular street cleaning equipment operated for municipal purposes), parking lots, driveways, sidewalks, walkways, patios, tennis courts, or similar or like hard-surfaced areas impervious to water.
- (2) Notwithstanding the above prohibition set forth in subdivision (1) Water may be used for emergency purposes in order to protect the public

health, safety, and welfare, including protection of life and property.

- (b) Stages II IV. The following uses of water are hereby determined and declared non-essential and are prohibited from and after notification of initiation of Water use reduction measures under Stages II, III, and IV, respectively:
 - (1) <u>Defective Equipment</u> Use of Water through, with, or by any plumbing, sprinkler, watering or irrigation system, or other device, equipment or appliance which is broken or defective, or which, for any reason, consumes or fails to use Water in the ordinary and customary manner or quantity for which it was designed, constructed or manufactured.
 - (2) Surface Flow Use of Water in any manner which, causes, allows, or permits the flooding of any Premises, or any portion thereof, or which causes, allows, or permits Water to escape from any Premises, or any portion thereof and flow therefrom into gutters, streets, or any surface water drainage system.
 - (3) <u>Water Conservation Devices</u> (i) use of any hose or similar device without a nozzle, valve, or other shut-off mechanism attached thereto and activated so as to reduce the flow of Water to the macticable minimum amount necessary to accomplish the mask to be performed thereby; (ii) Use of any shower near or other plumbing device without flow restricters or other water

Use reduction devices, provided that such devices shall be reasonably available.

- (4) Exterior cleaning Use of any hose or similar device for washing or cleaning any automobile, truck, trailer, trailer house, boat, mobilehome, camper, recreational vehicle, or other vehicle or for washing or cleaning the exterior surface of any dwelling, garage, commercial or industrial building, or appurtenance thereto, by directing Water at or upon such surface.
- (5) Swimming Pools, etc. (i) Use of Water for filling any new, or completely refilling any existing, swimming pool, basin, lake, lagoon, spa, hot tub or other contrivance for holding Water for swimming, recreational, decorative or similar purposes; (ii) Permitting swimming pools, hot tubs, or other similar or like devices for which covers are reasonably available to remain uncovered when not in use.
- (6) Fountains Use of Water to clean, fill, or maintain operating levels in decorative fountains, or similar or like ornamental structures.
- purposes: provided, however, that lawns and other outdoor Eandscaping may be Traigated not more than twice weekly only on weekdays (but excluding, in any event, the last day of months with 31 days) prior to 8:00 a.m. as follows:

- (i) Premises with odd street numbers odd days
 of the month;
- (ii) Premises with even street numbers even days of the month.
- Restaurants (i) the service of Water by any restaurant, or other eating refreshment or establishment to any patron thereof except upon specific request by a patron for such service; (ii) the operation of any restaurant or other eating or refreshment establishment without displaying signs on each table, counter, or other area thereof where food and beverages are consumed, informing patrons of the foregoing limitations upon the service of Water."

SECTION 2. This ordinance shall be effective upon adoption; provided that, within ten (10) days after its adoptions, this ordinance shall be published once in the official newspaper of the District.

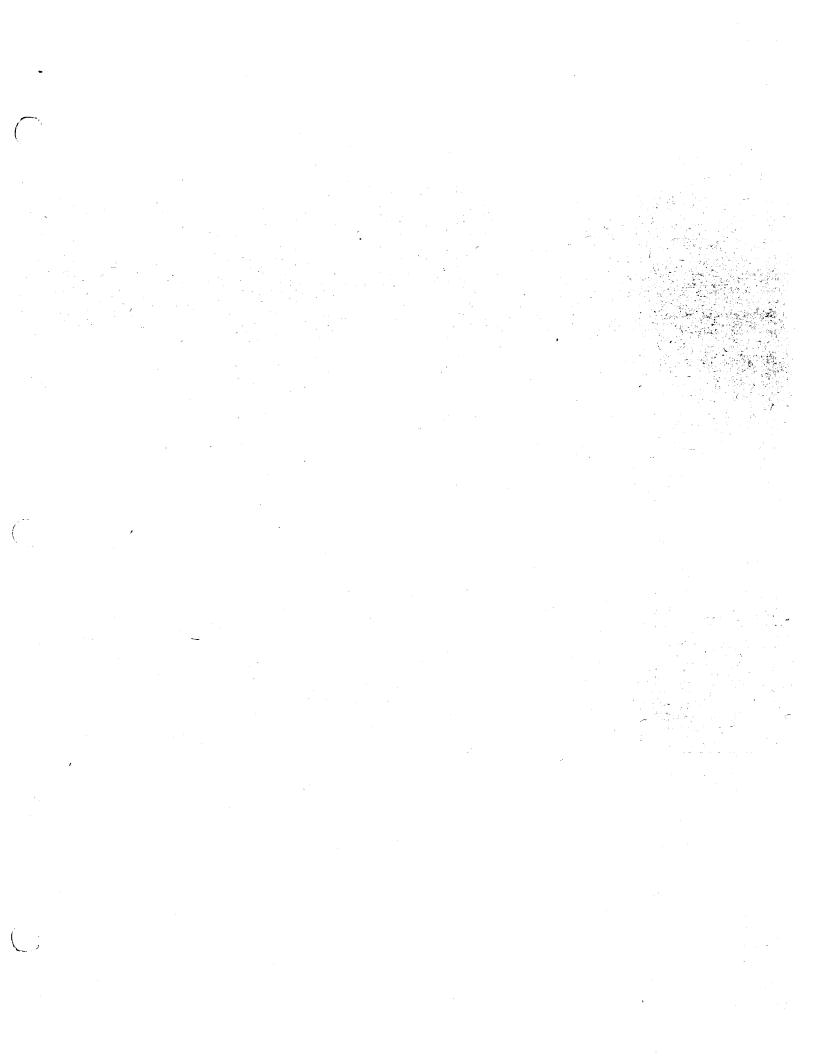
AYES: 4 - Directors G.T. (Tom) McCormick, Jeffrey G. Hansen,
Joseph Covello, Kenneth S. Caldwell

ABSTIME: 1 - Director Donald M. Schinnerer

Kenneth S. Caldrell, President

ATTEST:

Jancy Garble/ Secretary



ORDINANCE NO. 301

ORDINANCE FORMALLY ESTABLISHING RULES AND REGULATIONS GOVERNING THE USE OF RECYCLED WATER WITHIN THE DUBLIN SAN RAMON SERVICES DISTRICT, AND REPEALING ORDINANCE NO. 280

The Board of Directors ("Board") of the Dublin San Ramon Services District ("District"), a political subdivision of the State of California, in the Counties of Alameda and Contra Costa, does ordain as follows:

SECTION 1. FINDINGS

This Board finds that:

- A. The people of the State of California ("State") have a primary interest in the development of facilities to recycle wastewater to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the State (California Water Code, Section 13510);
- B. Conservation of all available water resources requires the maximum reuse of wastewater for beneficial uses of water (California Water Code, Section 461);
- C. Continued use of potable water for irrigation of greenbelt areas and other non-potable uses may be an unreasonable use of such water where recycled water is available (California Water Code, Section 13550);
- D. Resolution No. 42-92 adopted on August 4, 1992, established policies for the use, promotion, and priorities for recycled water service within and outside the District's water service boundaries;
- E. Ordinance No. 280 established a Recycled Water Use Zone within the District, consisting of all areas currently served by potable water services of the District and those additional

areas designated for such service by the pertinent Local Agency Formation Commission pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56000 et seq.);

- F. The State policies described in previous findings apply within the District. The District is highly dependent on limited imported water for domestic, agricultural and industrial uses, and the reliability of the supply of imported water is uncertain. Developing and utilizing recycled water can reduce the need for additional imported water. Moreover, recycled water is more readily available in seasons of drought when the supply of potable water for nonessential uses may be uncertain. In light of these circumstances, within the Recycled Water Use Zone as confirmed herein, certain uses of potable water may be considered unreasonable pursuant to Section 3 of this Ordinance.
- G. The environmental impacts of numerous development projects within the Recycled Water Use Zone have been examined in depth by various land use jurisdictions with the respective responsibility therefor, and for each such development project, the respective land use jurisdictions have adopted mitigation measures that require the use of recycled water for landscape irrigation on certain land use types to reduce the respective environmental impacts of the project under consideration. Accordingly, the respective land use jurisdictions have approved those development projects on the condition that recycled water is used for landscape irrigation. Among the major development projects of this type are the following:
 - 1. <u>The Schaefer Ranch project</u> within the City of Dublin was approved by said City under the Schaefer Ranch General Plan Amendment in conjunction with a Final Environmental Impact Report (FEIR) therefor in May 1996, and the territory

comprising the Schaefer Ranch project was annexed to the District effective December 23, 1997;

- 2. The Dougherty Valley area in Contra Costa County was approved by said County under the Dougherty Valley Specific Plan in conjunction with an FEIR in November 1996, and, subsequently, Eastern Dougherty Valley (Windernere Ranch) was annexed to the District effective October 20, 1997;
- Portions of eastern Dublin have been approved by the City under the Eastern Dublin Specific Plan and General Plan Amendment in conjunction with an FEIR for the Eastern Dublin Specific Plan and General Plan Amendment on May 10, 1993, as amended;
- H. The District has planned for, and made a commitment to, the provision of recycled water for approved uses within its potable water service area by forming the DSRSD-EBMUD Recycled Water Authority (DERWA), a public agency established by joint exercise of powers agreement between East Bay Municipal Utility District (EBMUD), and this District, and DERWA has certified an FEIR and approved a project that includes the service of recycled water in District's potable water service area;
- I District has prepared a Water Master Plan dated September 2000 to define facilities needed for providing recycled water service within the Recycled Water Use Zone;
- J. District has prepared Recycled Water Use Guidelines and a Recycled Water Section of the Standard Procedures, Specifications and Drawings ("Standards") which comprise a compilation of the criteria by which the planning, design, construction, operation, maintenance, and use of recycled water are administered by the District;

K. In consideration of the foregoing and to protect the common water supply of the region that is vital to public health and safety and to prevent endangerment of public and private property, requirements for the use of recycled water within the potable water service area of the District shall be, and hereby are, established as set forth this Ordinance.

SECTION 2. RECYCLED WATER USE ZONE

All areas designated for or currently served by potable water services of the District, from and after the effective date hereof, shall be, and hereby are, included within the Recycled Water Use Zone of the District, which zone is hereby established. Designation for potable water services shall mean that certain designation made by the Local Agency Formation Commission under the requirements of Government Code Section 56000 et seq.

SECTION 3. REQUIREMENT TO USE RECYCLED WATER AND RULES AND REGULATIONS GOVERNING SUCH USE

A. Mandatory Use of Recycled Water

1. It is the policy of the District that recycled water determined to be available pursuant to Section 13550 of the California Water Code shall be used for non-potable irrigation uses within the designated Recycled Water Use Zone wherever there is not an alternative higher or better use for the recycled water, its use is economically justified, financially and technically feasible, and consistent with legal requirements, preservation of public health, safety and welfare, and the environment.

Accordingly, unless otherwise provided hereunder, all new development within the Recycled Water Use Zone shall be required to use recycled water for appropriate landscape irrigation. Planning, design and construction in such new development shall incorporate recycled water facilities in conformity with District

Standards, and such facilities shall be connected to and use District recycled water services. The District's determination of appropriate landscape irrigation uses shall be based on Standards and/or requirements for water of unrestricted use quality contained in Title 22 of the California Code of Regulations, as said provisions may from time to time be amended, and applicable requirements of the Department of Health Services for recycled water distribution operations.

- 2. Compliance with the requirements of this Ordinance shall be a condition precedent to the District's provision of new potable water services within the Recycled Water Use Zone.
- 3. New development within the Recycled Water Use Zone which the District Engineer or his or her designee determines meets at least one of the following criteria, shall be exempt from the requirements of this Ordinance:
 - a. Residential development that will contain no landscape areas owned in common requiring irrigation.
 - b. Development of single-family, detached residences for which no homeowners' or similar association or entity will have responsibility for irrigation system maintenance and operations.
 - c. Development of single-family, detached residences for which a homeowners' or similar association or entity will have responsibility for irrigation and maintenance operations, but only for individual parcels corresponding to each single-family detached residence ownership.

- d. Development for which recycled water service is determined by the District Engineer or his or her designee not to be economical because of its distance from available or planned recycled water sources; and/or because irrigation demands within such development are very slight relative to overall water demands; and/or inadequate recycled water supply is available to serve the demand. Recycled water service that is not economical, as used herein, shall be determined by the District Engineer or his or her designee using such tests as he or she deems appropriate, and nothing in this Ordinance shall be construed to require that the District Engineer or his or her designee hold a hearing or take any evidence.
- 4. Existing potable water customers within the Recycled Water Use Zone shall be exempt from the requirements of this Ordinance except as set forth in subsections "a" or "b" below.
 - a. Landscape irrigation for property located within the area described in the Eastern Dublin General Plan Amendment, adopted by the City of Dublin May 10, 1993, shall not be exempt.
 - b. Any customers who received either a potable water connection or a construction permit (or both) containing conditions requiring use of recycled water or construction of recycled water facilities shall not be exempt.
- 5. Nothing in this Ordinance shall be construed to prohibit any existing customer from voluntarily applying for recycled water service. The District shall have the right to deny such application if the District Engineer or his or her designee determines that such recycled water service would not be economical because of its

distance from available or planned recycled water sources; and/or because anticipated irrigation demands served through that connection would be very slight relative to overall water demands; and/or because inadequate recycled water supply is available to serve the demand. Recycled water service that is not economical, as used herein, shall be determined by the District Engineer or his or her designee using such tests as he or she deems appropriate, and nothing in this Ordinance shall be construed to require that the District Engineer or his or her designee hold a hearing or take any evidence.

6. Procedures following determination

- a. Each applicant or customer shall be notified in writing of any determination made under the preceding paragraphs (3, 4 or 5) and of the basis therefor. The notice, including any proposed conditions and time schedule for compliance, and, if applicable, a recycled water permit application, shall be sent to the applicant or customer by certified mail. The determination shall be final if the applicant or customer does not file a written notice of appeal in compliance with paragraph d within thirty (30) days after receipt of the notice of determination.
- b. The applicant or customer may file a written notice of appeal with the District Secretary within thirty (30) days after any notice of determination to comply is delivered or mailed to the applicant or customer, and may request the Board to reconsider the determination or to modify the proposed conditions or schedule for conversion. The notice of appeal must specify

each ground of the appeal. The Board will act on the appeal after reviewing the record of the District Engineer's determination and the written notice of appeal, and such other information that the Board believes is necessary to review the District Engineer's determination. Nothing in this Ordinance shall be construed to require that the Board hold a hearing or take any evidence.

B. Rules and Regulations Governing Use of Recycled Water

- 1. Purpose. The purpose of these rules and regulations is to establish the requirements for the planning, design, construction, operation, and maintenance of customer-owned recycled water systems in compliance with District Standards and the requirements of other regulatory agencies, including the California Department of Health Services (DHS), San Francisco Bay Regional Water Quality Control Board (RWQCB) and the County Environmental Management Department (EMD).
- 2. Recycled Water Use Guidelines. The District Engineer shall prepare, maintain and update from time to time the Recycled Water Use Guidelines to implement these rules and regulations and to establish requirements and standards for the planning, design, construction, operation, and maintenance of customer-owned recycled water systems. Compliance with the Recycled Water Use Guidelines is a requirement of these rules and regulations. In the event of any conflicts between the Recycled Water Use Guidelines and these rules and regulations, these rules and regulations shall prevail.
- 3. Need for Site Approval. In addition, each recycled water use site must be reviewed and approved by the DHS

- 4. Land Use Authorities. Compliance with these rules and regulations will not excuse any requirements for approvals from land use authorities, which may include the submission of plans for the project to city or county departments, agencies, or districts, that have the authority to issue permits and requirements such as: plumbing, permits, building requirements, and planning criteria.
- 5. Protection of Public Health. Notwithstanding compliance with these rules and regulations, the District reserves the right to take any action necessary with respect to the operation of the customer's recycled water system to safeguard the public health. If at any time during construction or operation of the recycled water system, real or potential hazards are evidenced, such as cross connections with the potable system, improper tagging, signing, or marking, or unapproved/prohibited uses, the District reserves the right and has the authority to terminate immediately, without notice, recycled water service in the interest of protecting the public health.
- 6. Recycled Water Use License. The California Regional Water Quality Control Board requires that the District establish permitting, tracking, record keeping, monitoring, and inspection procedures for all water recycling. The Recycled Water Use License and referenced documents serve as this permit. The Recycled Water Use License constitutes permission for the customer to use recycled water in conformance with all District Standards, Codes, Ordinances, policies and these guidelines including any special site-specific requirements that may be identified. A standard form Recycled Water Use License and required referenced documents shall be included in the Recycled Water Use Guidelines.

- 7. Recycled Water Systems Application Process. Applicant, whether or not an existing potable water customer, shall prepare and submit a general Application for Services that includes a Recycled Water Service Application/Supplemental Information in the form defined in the Recycled Water Use Guidelines.
- 8. General Design Requirements. To assure the protection of the public and those operating and maintaining the recycled water irrigation system, design of the customer-owned recycled water irrigation facilities is required to meet standards established by the California State Department of Health Services, and the District Engineer shall prepare, maintain and update from time to time the Standards.
- 9. Design & Construction of Recycled Water Systems. Applicant, whether or not an existing potable water customer, shall prepare and submit the construction plans for the required District-owned facilities and the customer-owned facilities in compliance with the requirements set forth in the Recycled Water Use Guidelines and the Standards. Upon approval of the design by the District Engineer, the applicant shall obtain all required permits and construct the recycled water facilities, subject to inspection by the City, County and the District, and shall arrange for testing of backflow prevention devices, testing for cross connections, and coverage testing, all in compliance with the requirements set forth in the Recycled Water Use Guidelines.
- 10. On-Site Supervisor of Customer Facilities. Each recycled water customer is required to designate, in compliance with the Recycled Water Use Guidelines, an On-site Supervisor who is knowledgeable about all facets of the system, and who

shall be responsible for the safe and efficient operation of the customer's recycled water system.

- 11. Operation and Maintenance of Recycled Water Systems. The customer, through the On-site Supervisor, shall operate and maintain the customer's recycled water system in compliance with the requirements set forth in the Recycled Water Use Guidelines.
- 12. Emergency Procedures. In case of a major earthquake, flood, fire, tornado, structural failure, or other incident, which could likely damage the recycled or potable water systems, the customer, through the On-site Supervisor, shall comply with of the emergency procedures' requirements of the Recycled Water Use Guidelines.
- 13. Emergency Cross-Connection Response Plan. In the event that a backflow incident or cross connection is suspected or occurs, the customer shall immediately implement the procedures set forth in the emergency cross-connection response plan of the Recycled Water Use Guidelines.

C. Payment for Recycled Water Facilities

Facilities required for provision of recycled water services shall be constructed and financed in conformance with the District Major Infrastructure Policy (Resolution No. 55-97), as said policy provides as of the effective date hereof or as it may from time to time be amended.

SECTION 4. DEFINITIONS

The following terms are defined for purposes of this Ordinance:

A. Alameda County Environmental Management Department (Alameda County EMD) - This agency is the local health protection agency for most areas of Alameda County.

- B. Applicant Any person or entity that applies for recycled water service under the terms of the appropriate regulations. The approved customer may be a different party than the applicant but must be specified in the Recycled Water Use License.
- C. Approved Use An application of recycled water in a manner, and for a purpose, designed in a Recycled Water Use License issued by the District and in compliance with all applicable regulatory agency requirements.
- D. Contra Costa County Environmental Management Department (Contra Costa County EMD) This agency is the local health protection agency for most areas of Contra Costa County.
- E. Cross Connection Any physical connection between any part of a water system used or intended to supply water for drinking purposes and any source or system containing water or substance that is not or cannot be approved as safe, wholesome and potable for human consumption. This includes direct piping between the two systems, regardless of the presence of valves, backflow prevention devices, or other appurtenances.
 - F. Customer A person furnished recycled water service by the District.
- G. Customer Facilities Designates or relates to facilities owned or operated by a customer, downstream of the water meter, and typically consists of distribution and irrigation lines and appurtenances such as pumps, control valves and sprinklers. All customer system/facilities are the property of the user, and are to be maintained and operated by the user and/or their employees.
- H. Development (1) The placement or erection of any structure or other improvements and all alterations of the land and construction incident thereto for the purpose of changing the type, density, or intensity of use of land, which use(s) will (2) require one or more new potable water connections.

- I. District The Dublin San Ramon Services District
- J. Greenbelt Areas A greenbelt area includes, but is not limited to, golf courses, cemeteries, parks and landscaping.
- K. On-Site Supervisor The customer shall designate an On-site Supervisor to provide liaison with the District. This person shall be available to the District at all times, shall have the authority to carry out any requirements of the District, and shall be responsible for the installation, operation and maintenance of the recycled and potable water systems and also prevention of potential hazards.
- L. Point of Connection This is the point where the customer's system ties to the District's system. This is usually at the outlet of the water meter.
- M. Potable Water Water of a quality suitable for human consumption as defined in the State Safe Drinking Water Act, Health & Safety Code, Section 116275, Subdivision (e), as it may be amended from time to time.
 - N. Potable Water Customer A person furnished potable water service by the District.
- O. Recycled Water Water produced by further treatment of secondary effluent and of a quality suitable for unrestricted irrigation as defined in Title 22, California Code of Regulations, Division 4, Environmental Health, Chapter 3, Reclamation Criteria, as it may be amended from time to time.
- P. Recycled Water Use License A license issued by the District to the customer, which outlines monitoring, self-inspection, reporting, and site-specific requirements. This license is required by the California Regional Water Quality Control Board. This license allows the customer to use recycled water in accordance with District Standards, Codes, Ordinances, policies and these guidelines and all applicable regulatory agency requirements.

- Q. Secondary Effluent Wastewater treated that meets the requirements of the District NPDES discharge permit governing wastewater disposal, as it may be amended from time to time.
- R. State of California Department of Health Services (State DHS) Refers to the State of California Department of Health Services, Drinking Water Field Operations Branch San Francisco District.
 - S. Water All water delivered to a customer by the District.

SECTION 5. FINDINGS IN CONFORMANCE WITH CEQA

This Board hereby finds, in its independent judgment, that the environmental impacts of the adoption of this Ordinance are adequately examined and described in the Final Environmental Impact Report for the City of Dublin Schaefer Ranch General Plan Amendment, the Contra Costa County Final Environmental Impact Report for Dougherty Valley Specific Plan and General Plan Amendment, and the DSRSD EBMUD Recycled Water Authority Final Environmental Impact Report for the San Ramon Valley Recycled Water Program.

SECTION 6. EFFECTIVE DATE

This Ordinance shall be effective thirty (30) days after its adoption.

SECTION 7. REPEALER

Ordinance No. 280, entitled "Ordinance Implementing the Dublin San Ramon Services District Recycled Water Policy (Resolution No. 42-92), Establishing a Recycled Water Use Zone Corresponding to the Potable Water Service Area of the District, and Repealing Ordinance No. 276," adopted April 7, 1998, is hereby repealed.

Ord. No. 301

ADOPTED by the Board of Directors of the Dublin San Ramon Services District at its regular meeting held on the 6th day of April, 2004, passed by the following vote:

AYES:

5 - Directors Jeffrey G. Hansen, Thomas W. Ford, G.T. (Tom) McCormick,

Richard W. Rose, Daniel J. Scannell

NOES:

0

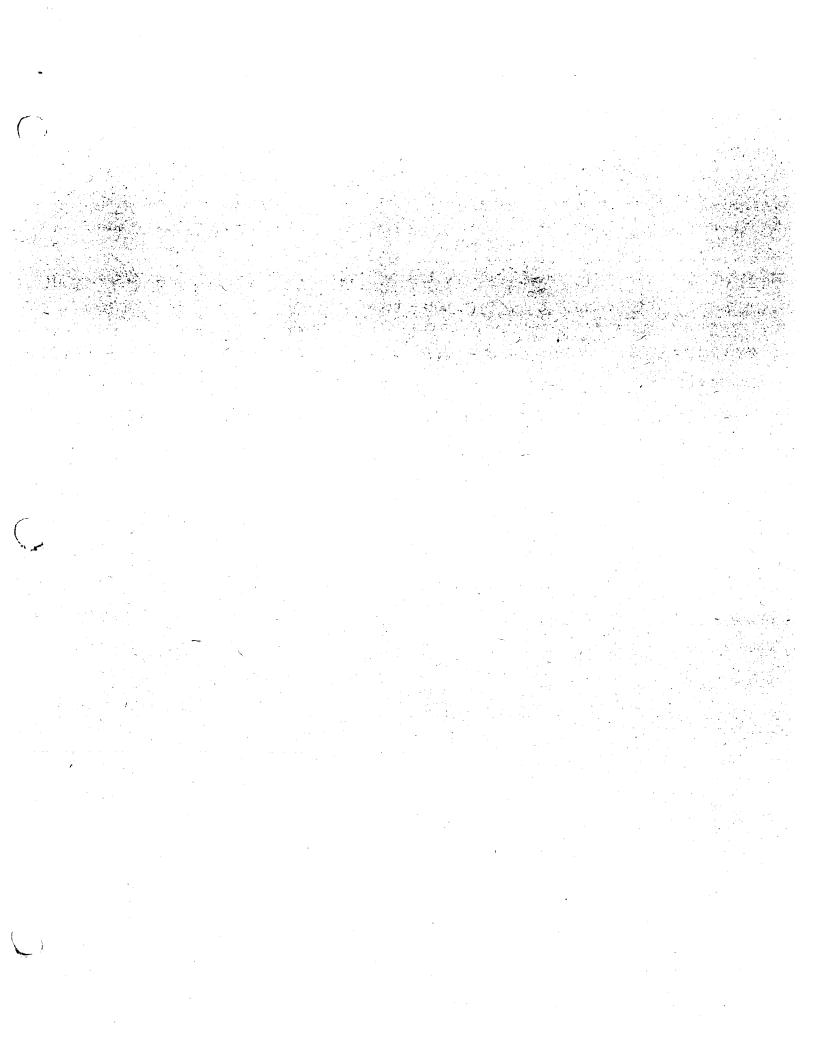
ABSENT:

0

Daniel J. Scannell, President

ATTEST:

Nancy G. Haffield, District Secretary



CITY OF DUBLIN WATER EFFICIENT LANDSCAPE ORDINANCE

Ordinance No.: Date of Adoption:

December 14, 1992

file #

City Of Dublin Water Efficient Landscape Ordinance

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APPENDIX: SAMPLE FORMS

Water Conservation Concept Statement Certificate of Substantial Completion

ORDINANCE NO. 18-92

AN ORDINANCE OF THE CITY OF DUBLIN

ADDING CHAPTER 8.20 PERTAINING TO WATER EFFICIENT LANDSCAPING TO THE MUNICIPAL CODE AND DECLARING THE ORDINANCE AN URGENCY ORDINANCE

The City Council of the City of Dublin does ordain as follows:

SECTION 1: Chapter 8.20 shall be added to the City of Dublin Municipal Code and read as follows:

"Section 8.20.010: PURPOSE

The purpose of this ordinance is to:

- (a) Reduce irrigation water consumption with no decline in the physical and visual quality of urban landscaping;
- (b) Establish a sufficient but flexible structure for designing, installing, and maintaining water efficient landscapes in local projects.

Section 8.20.020: APPLICABILITY

The requirements of this ordinance shall apply to all Building or Development permits issued after December 31, 1992, for:

- (a) All new and rehabilitated landscaping for public agency projects and private development projects that require a Development and/or Building permit with new or rehabilitated landscapes that meet the driteria of Section 8.20.020, including but not limited to industrial, commercial, and recreational projects; and
- (b) Developer-installed landscaping in single-family and multi-family projects; and

The requirements of this ordinance do not apply to:

- (a) Homeowner-provided landscaping at existing and new single-family and multi-family projects;
- (b) Cemeteries;
- (c) Registered historical sites;

- (d) Ecological restoration projects that do not require a permanent irrigation system;
- (e) Landscaping irrigated solely by reclaimed water and to which no potable pipeline exists for irrigation purposes; or
- (f) Any project with a landscaped area less than 5,000 square feet.

Section 8.20.030: DEFINITIONS

The words used in this ordinance have the meaning set forth as follows:

- (a) "anti-drain valve" or "check valve" means a valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.
- (b) "application rate" means the depth of water applied to a given area, usually measured in inches per hour.
- (c) "applied water" means the portion of water supplied by the irrigation system to the landscape.
- (d) "automatic controller" means a mechanical or solid state timer, capable of operating valve stations to set the days and length of time of a water application.
- (e) "backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- (f) "certified landscape irrigation auditor" means an individual certified by the Irrigation Association (a nationwide organization). The State of California provides training that is certified by the Irrigation Association.
- (g) "City" means the City of Dublin.
- (h) "conversion factor (0.62)" means a number that converts the maximum applied water allowance from acre-inches per acre per year to gallons per square foot per year. The conversion factor is calculated as follows:
 - (325,851 gallons/ 43,560 square feet)/12 inches = (0.62)
 325,851 gallons = one acre foot
 43,560 square feet = one acre
 12 inches = one foot

To convert gallons per year to 100-cubic-feet per year, another common billing unit for water, divide gallons per year by 748.

(748 gallons = 100 cubic feet.)

- (i) "Development Permit" means approval for any type of development or development project as defined in Government Code Section 65927 and 65928.
- (j) "District" means the Dublin San Ramon Services District.
- (k) "ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- (1) "emitter" means drip irrigation fittings that deliver water slowly from the system to the soil.
- (m) "established landscape" means the point at which plants in the landscape have developed roots into the soil adjacent to the root ball.
- (n) "establishment period" means the first year after installing the plant in the landscape.
- (o) "Estimated Applied Water Use" means the portion of the Estimated Total Water Use that is derived from applied water. The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance. The Estimated Applied Water Use may be the sum of the water recommended through the irrigation schedule, as referenced in Section 8.20.040 (II) (c).
- (p) "Estimated Total Water Use" means the annual total amount of water estimated to be needed to keep the plants in the landscaped area healthy. It is based upon such factors as the local evapotranspiration rate, the size of the landscaped area, the types of plants, and the efficiency of the irrigation system as described in Section 8.20.040 (II) (d).
- (q) "ET adjustment factor" means a factor of 0.8, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

A combined plant mix with a site-wide average of 0.5 is the basis of the plant factor portion of this calculation. The irrigation efficiency for purposes of the ET Adjustment Factor is 0.625.

Therefore, the ET Adjustment Factor (0.8) - (0.5/0.625).

- (r) "evapotranspiration" means the quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time.
- (s) "flow rate" means the rate at which water flows through pipes and valves (gallons per minute or cubic feet per second).
- (t) "hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or non-irrigated. For

example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a non-irrigated hydrozone.

- (u) "infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).
- (v) "irrigation efficiency" means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum irrigation efficiency for purposes of this ordinance is 0.625. Greater irrigation efficiency can be expected from well designed and maintained systems.
- (w) "landscape irrigation audit" means a process to perform site inspections, evaluate irrigation systems, and develop efficient irrigation schedules.
- (x) "landscaped area" means the entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes such as decks and patios, and other non-porous areas. Water features are included in the calculation of the landscaped area. Areas dedicated to edible plants, such as orchards or vegetable gardens are not included.
- (y) "lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- (z) "main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.
- (aa) "Maximum Applied Water Allowance" means, for design purposes, the upper limit of annual applied water for the established landscaped area as specified in Section 8.20.040 (II) (b). It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the landscaped area. The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance.
- (bb) "mulch" means any material such as leaves, bark, straw or other materials left loose and applied to the soil surface for the beneficial purpose of reducing evaporation.
- (cc) "operating pressure" means the pressure at which a system of sprinklers is designed to operate, usually indicated at the base of a sprinkler.
- (dd) "overhead sprinkler irrigation systems" means those with high flow rates (pop-ups, impulse sprinklers, rotors, etc.)
- (ee) "overspray" means the water which is delivered beyond the landscaped area, wetting pavements, walks, structures, or other non-landscaped areas.

- (ff) "permit" means a Building or Development permit for a project which, as part of its scope, involves the installation of new landscaping or rehabilitating an existing landscape.
- (gg) "plant factor" means a factor that, when multiplied by reference evapotranspiration, estimates the amount of water used by plants. For purposes of this ordinance, the average plant factor of low water using plants ranges from 0 to 0.3, for average water using plants the range is 0.4 to 0.6, and for high water using plants the range is 0.7 to 1.0.
- (hh) "rain sensing device" means a system which automatically shuts off the irrigation system when it rains.
- (ii) "record drawing" or "as-builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.
- (jj) "recreational area" means areas of active play or recreation such as sports fields, school yards, picnic grounds, or other areas with intense foot traffic.
- (kk) "recycled water," "reclaimed water," or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation; not intended for human consumption.
- "reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is given in inches per day, month, or year as represented in Section 8.20.060, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated.
- (mm) "rehabilitated landscape" means any relandscaping project that requires a permit.
- (nn) "runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a severe slope.
- (00) "soil moisture sensing device" means a device that measures the amount of water in the soil.
- (pp) "soil texture" means the classification of soil based on the percentage of sand, silt, and clay in the soil.
- (qq) "sprinkler head" means a device which sprays water through a nozzle.

- (rr) "static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.
- (ss) "station" means an area served by one valve or by a set of valves that operate simultaneously.
- (tt) "turf" means a surface layer of earth containing mowed grass with its roots. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyu-grass, Seashore paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.
- (uu) "walve" means a device used to control the flow of water in the irrigation system.
- (vv) "water conservation concept statement" means a one-page checklist and a narrative summary of the project as shown in Section 8.20.040 (II).

Section 8.20.040: PROVISIONS FOR NEW OR REHABILITATED LANDSCAPES

I. LANDSCAPE DOCUMENTATION PACKAGE

- (a) A copy of the landscape documentation package conforming to this chapter shall be submitted to the City. No Development or Building permit shall be issued until the City reviews and approves the landscape documentation package.
- (b) A copy of the approved landscape documentation package shall be provided to the property owner or site manager along with the record drawings and any other information normally forwarded to the property owner or site manager.
- (c) A copy of the Water Conservation Concept Statement and the Certificate of Substantial Completion shall be sent by the project manager to the City and to the local retail water purveyor, the Dublin San Ramon Services District, prior to the final sign-off of the permit by the City.
- (d) Each landscape documentation package shall include the following elements, which are described in Section 8.20.040 (II):
 - (1) Water Conservation Concept Statement
 - (2) Calculation of the Maximum Applied Water Allowance
 - (3) Calculation of the Estimated Applied Water Use
 - (4) Calculation of the Estimated Total Water Use
 - (5) Landscape Design Plan
 - (b) Irrigation Design Plan
 - (7) Irrigation Schedules
 - (B) Maintenance Schedule
 - (9) Landscape Irrigation Audit Schedule
 - (10) Grading Design Plan
 - (11) Soil Analysis (if applicable)

(12) Certificate of Substantial Completion. (To be submitted after installation of the project).

II. ELEMENTS OF LANDSCAPE DOCUMENTATION PACKAGE

A. Water Conservation Concept Statement

Each landscape documentation package shall include a cover sheet, referred to as the Water Conservation Concept Statement. The City will provide a sample statement. It shall serve as a checklist to verify that the elements of the landscape documentation package have been completed and have a narrative summary of the project.

- B. The Maximum Applied Water Allowance
 - (1) A project's Maximum Applied Water Allowance shall be calculated using the following formula:

MAWA - (ETo) (0.8) (LA) (0.62) where:

MAWA - Maximum Applied Water Allowance (gallons per year)

ETo - Reference Evapotranspiration (inches per year)

0.8 - ET Adjustment Factor

LA - Landscaped Area (square feet)

0.62 - conversion factor (to gallons per square foot)

- (2) Portions of landscaped areas in public and private projects such as parks, playgrounds, sports fields, golf courses, or school yards where turf provides a playing surface or serves other recreational purposes are considered recreational areas and may require water in addition to the Maximum Applied Water Allowance. A statement shall be included with the landscape design plan, designating recreational areas to be used for such purposes and specifying any needed amount of additional water above the Maximum Applied Water Allowance.
- C. Estimated Applied Water Use
 - (1) The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance.
 - (2) A calculation of the Estimated Applied Water Use shall be submitted with the Landscape Documentation Package. It may be calculated by summing the amount of water recommended in the irrigation schedule.
- D. Estimated Total Water Use
 - (1) A calculation of the Estimated Total Water Use shall be submitted with the Landscape Documentation Package. The Estimated Total Water Use may be calculated by summing the amount of water

recommended in the irrigation schedule or calculate from the following formula:

The Estimated Total Water Use for the entire landscaped area equals the sum of the Estimated Water Use of all hydrozones in that landscaped area.

EWU (hydrozone) - (ETo) (PF) (HA) (.62)

(IE)

EWU (hydrozone) - Estimated Water Use (gallons per year)

- Reference Evapotranspiration (inches per year)

- PF - plant factor

- hydrozone area (square feet)

(.62) - conversion factor

E. Landscape Design Plan

ΙE

A landscape design plan meeting the following requirements shall be submitted as part of the landscape documentation package.

- irrigation efficiency

- (1): Plant Selection and Grouping
 - (a) Any plants may be used in the landscape, providing the Estimated Applied Water Use recommended does not exceed the Maximum Applied Water Allowance and that the plants meet the specifications set forth in (b), (c), (d), and (e).
 - (b) This Ordinance adopts by reference the plants listed in Water Conserving Plants and Landscapes for the Bay Area published by the East Bay Municipal Utility District, and for determining water usage, the plants listed in the WUCOLS PROJECT (Water Use Classification of Landscape Species) developed by the University of California Cooperative Extension.
 - (c) Plants having similar water use shall be grouped together in distinct hydrozones.
 - (d) Plants shall be selected appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged. The planting of trees is encouraged wherever it is consistent with the other provisions of this ordinance.
 - (e) Fire prevention needs shall be addressed in areas that are fire prone. Information about fire prone areas and appropriate landscaping for fire safety is available from the Dougherty Regional Fire Authority or the California Department of Forestry.

(2) Water Features

- (a) Recirculating water shall be used for decorative water features.
- (b) Pool and spa covers are encouraged.
- (3) Landscape Design Plan Specifications

The landscape design plan shall be drawn on project base sheets at a scale that accurately and clearly identifies:

- (a) Designation of hydrozones.
- (b) Landscape materials, trees, shrubs, groundcover, turf, and other vegetation. Planting symbols shall be clearly drawn and plants labeled by botanical name, common name, container size, spacing, and quantities of each group of plants indicated.
- (c) Property lines and street names.
- (d) Streets, driveways, walkways, and other paved areas.
- (e) Pools, ponds, water features, fences, and retaining walls.
- (f) Existing and proposed buildings and structures including elevation view if applicable.
- (g) Natural features including but not limited to rock outcroppings, existing trees, shrubs that will remain.
- (h) Tree staking, plant installation, soil preparation details, and any other applicable planting and installation details.
- (i) A calculation of the total landscaped area in relation to the project site and a calculation of total turf area in relation to the landscaped area.
- (j) Designation of recreational areas.

F. Irrigation Design Plan

An irrigation design plan meeting the following conditions shall be submitted as part of the Landscape Documentation Package.

- (1) Irrigation Design Criteria
 - (a) Runoff and Overspray. Soil types and infiltration rate shall be considered when designing irrigation systems. All irrigation systems shall be designed to avoid runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas,

walks, roadways, or structures. Proper irrigation equipment and schedules, including features such as repeat cycles, shall be used to closely match application rates to infiltration rates therefore minimizing runoff.

Special attention shall be given to avoid runoff on slopes and to avoid overspray in planting areas with a width less than ten feet, and in median strips.

No overhead sprinkler irrigation systems shall be installed in median strips less than ten feet wide.

(b) <u>Irrigation Efficiency</u>. For the purpose of determining the maximum applied water allowance, irrigation efficiency is assumed to be 0.625. Irrigation systems shall be designed, maintained, and managed to meet or exceed 0.625 efficiency.

(c) Equipment.

Water Meters: Separate landscape water meters shall be installed for all projects except for single family homes.

Controllers: Automatic control systems shall be required for all irrigation systems and must be able to accommodate all aspects of the design.

Valves: Plants which require different amounts of water shall be irrigated by separate valves. If one valve is used for a given area, only plants with similar water use shall be used in that area. Anti-drain (check) valves shall be installed in strategic points to minimize or prevent low-head drainage.

Sprinkler Heads: Heads and emitters shall have consistent application rates within each control valve circuit. Sprinkler heads shall be selected for proper area coverage, application rate, operating pressure, adjustment capability and ease of maintenance.

Rain Sensing Override Devices: Rain sensing override devices are recommended for all irrigation systems.

Soil Moisture Sensing Devices: It is recommended that soil moisture sensing devices be considered where appropriate.

(2) Recycled Water

(a) The installation of recycled water irrigation systems (dual distribution systems) shall be required to allow for the current and future use of recycled water, unless a written exemption has been granted as described in the following section (2)(b).

- (b) Irrigation systems shall make use of recycled water unless a written exemption has been granted by the District, stating that recycled water meeting all health standards is not available and will not be available in the foreseeable future for this particular site.
- (c) The recycled water irrigation systems shall be designed and operated in accordance with all local and state codes.
- (3) Irrigation Design Plan Specifications

Irrigation systems shall be designed to be consistent with hydrozones.

The irrigation design plan shall be drawn on project base sheets. It shall be separate from, but use the same format as, the landscape design plan. The scale shall be the same as that used for the landscape design plan described in Section 8.20.040 (II) (e).

The irrigation design plan shall accurately and clearly identify:

- (a) Location and size of separate water meters for the landscape, if applicable.
- (b) Location, type, and size of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, and backflow prevention devices.
- (c) Static water pressure at the point of connection to the public water supply.
- (d) Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (psi) for each station.
- (e) Recycled water irrigation systems as specified in the Section 8.20.040 (II) (f) (2).

G. Irrigation Schedules

Irrigation schedules satisfying the following conditions shall be submitted as part of the Landscape Documentation Package.

- (1) An annual irrigation program with monthly irrigation schedules shall be required for the plant establishment period, for the established landscape, and for any temporarily irrigated areas.
- (2) The irrigation schedule shall:

- (a) include run time (in minutes per cycle), suggested number of cycles per day, and frequency of irrigation for each station; and
- (b) provide the amount of applied water (in hundred cubic feet, gallons, or in whatever billing units the District uses) recommended on a monthly and annual basis.
- (3) The total amount of water for the project shall include water designated in the Estimated Total Water Use calculation plus water needed for any water features, which shall be considered as a high water using hydrozone.
- (4) Recreational areas designated in the landscape design plan shall be highlighted and the irrigation schedule shall indicate if any additional water is needed above the Maximum Applied Water Allowance because of high plant factors (but not due to irrigation inefficiency.)
- (5) Whenever possible, irrigation scheduling shall incorporate the use of evapotranspiration data such as those from the California Irrigation Management Information System (CIMIS) weather stations to apply the appropriate levels of water for different climates.
- Whenever possible, landscape irrigation shall be scheduled between 9:00 p.m. and 7:00 a.m. to avoid irrigating during times of high wind or high temperature.

H. Maintenance Schedules

A regular maintenance schedule satisfying the following conditions shall be submitted as part of the Landscape Documentation Package:

- (1) Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule shall include but not be limited to checking, adjusting, and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning, and weeding in all landscaped areas.
- (2) Whenever possible, repair of irrigation equipment shall be done with the originally specified materials or their equivalents.

I. Landscape Irrigation Audit Schedules

A schedule of landscape irrigation audits, for all but single family residences, satisfying the following conditions shall be submitted to the City as part of the Landscape Documentation Package.

(1) At a minimum, audits shall be in accordance with the State of California Landscape Water Management Program as described in the Landscape Irrigation Auditor Handbook, the entire document, which is hereby incorporated by reference. (See Landscape Irrigation

Auditor Handbook (June 1990) version 5.5 [formerly Master Auditor Training]), or as may be updated.

(2) The schedule shall provide for landscape irrigation audits to be conducted by State-certified landscape irrigation auditors at least once every five years and submitted to the local water purveyor, the Dublin San Ramon Services District.

J. Grading Design Plan

Grading design plans satisfying the following conditions shall be submitted as part of the Landscape Documentation Package.

- (1) A grading design plan shall be drawn on project base sheets. It shall be separate from but use the same format as the landscape design plan.
- (2) The grading design plan shall indicate finished configurations and elevations of the landscaped area, including the height of graded slopes, drainage patterns, pad elevations, and finish grade.

K. Soils

- (1) A soil analysis for projects with landscaping over 20,000 square feet (SF) satisfying conditions (a),(b), and (c) shall be prepared by a licensed soils lab or analyst and shall be submitted as part of the Landscape Documentation Package.
 - (a) Determination of soil texture, indicating the percentage of organic matter.
 - (b) An approximate soil infiltration rate (either measured or derived from soil texture/infiltration rate tables). A range of infiltration rates shall be noted where appropriate.
 - (c) Measure of pH, and total soluble salts.
- (2) For projects with landscaping under 20,000 SF (unless * soils analysis has been undertaken), soil shall be amended using six (6) cubic yards (CY) of nitrified soil conditioner per 1,000 SF incorporated into the top six (6) inches of soil.
- (3) A mulch of at least three inches shall be applied to all planting areas except turf.

L. Certification

(1) Upon completing the installation of the landscaping and the irrigation system, an irrigation audit shall be conducted by a certified landscape irrigation auditor prior to the final field observation. (See Landscape Irrigation Auditor Handbook as referenced in Section 8.20.040 (II) (i).)

- A licensed landscape architect or contractor, certified irrigation designer, or other licensed or certified professional in a related field shall conduct a final field observation and, prior to occupancy of the building or establishment of use of property, shall provide a certificate of substantial completion to the City. The certificate shall specifically indicate that plants were installed as specified, that the irrigation system was installed as designed, and that an irrigation audit has been performed, along with a list of any observed deficiencies.
- (3) Certification shall be accomplished by completing a Certificate of Substantial Completion and delivering it to the City, to the retail water supplier, and to the Owner of Record. The City will provide a sample certificate form.

III. PUBLIC EDUCATION

A. Publications.

Information about the efficient use of landscape water is available to water users throughout the community from the District.

B. Model Homes.

At least one model home that is landscaped in each project consisting of eight or more homes shall demonstrate via signs and information the principles of water efficient landscapes described in this ordinance.

- Signs shall be used to identify the model as an example of a water efficient landscape and featuring elements such as hydrozones, irrigation equipment and others which contribute to the overall water efficient theme.
- Information shall be provided by the project developer about designing, installing, and maintaining water efficient landscapes.

Section 8.20.050: PROVISIONS FOR EXISTING LANDSCAPES

WATER MANAGEMENT

All existing landscaped areas in the City that are one acre or more, including golf courses, green belts, common areas, multi-family housing, businesses, parks, cemeteries, and publicly owned landscapes shall perform a landscape irrigation audit at the property owner's request at least every five years. At a minimum, the audit shall be in accordance with the California Landscape Water Management Program as described in the Landscape Irrigation Auditor Handbook, the entire document which is hereby incorporated by reference. (See Landscape Irrigation Auditor Handbook, Dept. of Water Resources, Water Conservation Office (June 1990) version 5.5, or as may be updated.) Results shall be presented to the District for review.

Recognition of projects that stay within the Maximum Applied Water Allowance is encouraged.

Committee of the Committee of the

II. WATER WASTE PREVENTION

Water Waste Prevention shall fall under the authority of the District.

Section 8.20.060: REFERENCE EVAPOTRANSPIRATION in inches (Historical Data, extrapolated from 12-Month Normal Year ETo Maps and U.C. publication 21426):

Ann.

County City Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec. ETo

Alameda Livermore 1.2 1.5 2.9 4.4 5.9 6.6 7.4 6.4 5.3 3.2 1.5 0.9 47.2

Oakland 1.5 1.5 2.8 3.9 5.1 5.3 6.0 5.5 4.8 3.1 1.4 0.9 41.8"

SECTION 2: Urgency Ordinance: This provisions of this ordinance shall take effect on January 1, 1993, pursuant to Government Code Section 36937 as an urgency ordinance. The urgency is based on the fact that such an ordinance is required by the State of California prior to January 1, 1993.

ECTION 3: Posting of Ordinance: The City Clerk of the City of Dublin shall cause this Ordinance to be posted in at least three (3) public places in the City of Dublin in accordance with Section 36933 of the Government Code of the State of California.

PASSED, APPROVED, AND ADOPTED this 14th day of December, 1992.

AYES: Councilmembers Burton, Houston, Howard, Moffatt

and Mayor Snyder

NOES: None

ABSENT: None

Mayor

ATTEST:

City (Clark

::\december\ldscpord

SAMPLE WATER CONSERVATION CONCEPT STATEMENT

Project Site	:			_ Pro	ject Numbe	er:	
Project Loca	tion:					·	
Landscape Ar	chitec	t:				<u> </u>	
Irrigation D	esigne	er:					
Contractor:			-			· ·	
Included in (Check to in			ttal package are:			. :	
	1.	Maximum Appl	ied Water Allowan	ce:	gallons	or cubic	feet/year
	2.	Estimated Ap	plied Water Use:		gallons	or cubic	feet/year
	3.	Estimated To	otal Water Use:		gallons	or cubic	feet/year
	4.	Landscape De	esign Plan				
·	5.	Irrigation I	esign Plan			:	
	6.	Irrigation S	Schedules				
	7.	Maintenance	Schedule			÷	
	8.	Landscape In	crigation Audit Sc	hedule		•	
	9.	Grading Desi	ign Plan			:	
	10.	Soil Analys:	is			•	
(Check One)		New Construc	ction	Rehabilit	ation _		
Description	of Pro	oject:	(Briefly describe are intended to a water use)				
•							
					•	:	
						:	
						į	
Date:			Prepared By:			:	

SAMPLE CERTIFICATE OF SUBSTANTIAL COMPLETION

Project Site	:	P	Project Number:				
Project Loca	tion:			:			
Preliminary	Projec	t Documentation Submitted: (Check in	dicating su	bmittal)			
	1.	Maximum Applied Water Allowance:	gallons	or cubic	feet/year		
	2.	Estimated Applied Water Use:	gallons	or cubic	feet/year		
	3.	Estimated Total Water Use:	gallons	or cubic	feet/year		
	4.	Landscape Design Plan		•			
-	5.	Irrigation Design Plan		•			
	6.	Irrigation Schedules		; ;			
	7.	Maintenance Schedule		: : :			
-	8.	Landscape Irrigation Audit Schedule					
	9.	Grading Design Plan		:			
	10.	Soil Analysis					
Post-Install	ation	Inspection: (Check indicating substa	intial compl	Letion)			
	A.	Plants installed as specified		· :			
	В.	Irrigation system installed as design dual distribution system for re		er			
	c.	minimal runoff or overspray Landscape Irrigation Audit performed		:			
		nittal package and a copy of this cert mager and to Dublin San Ramon Services		nave been	provided		

COMMENTS:

I/we	certify	that	work	has	been	installed	in	accordance	with	the	contract	documents.
------	---------	------	------	-----	------	-----------	----	------------	------	-----	----------	------------

Contractor

Signature

Date

State License #

I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the Water Efficient Landscape Ordinance and that the landscape planting and irrigation installation conform with the approved plans and specifications.

Landscape Architect

Signature

Date

State License #

or Irrigation Designer/Consultant

or Licensed or Certified Professional in a Related Field

I/we certify that I/we have received all of the contract documents and that it is our responsibility to see that the project is maintained in accordance with the contract documents.

Owner

Signature

Date

APPENDIX E

Final Revised Water Service Analysis for Eastern Dublin



F

The region

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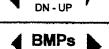
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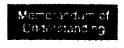
APPENDIX F

CUWCC Best Management Practices Report Filing 03-04



You are viewing coverage for: BMP 01 03-04 YRs







Bost Management Practices Report Filing

BMP 01 Coverage: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 1 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

A Reporting Unit (RU) must meet three conditions to satisfy strict compliance for BMP 1.

Condition 1: Adopt survey targeting and marketing strategy on time

Condition 2: Offer surveys to 20% of SF accounts and 20% of MF units during report period

Condition 3: Be on track to survey 15% of SF accounts and 15% of MF units within 10 years of implementation start date.

Test for Condition 1

Latest Dublin San Ramon Services District to Implement Targeting/Marketing Program:

1999

Single-**Family**

Mutti-**Family**

Year Dublin San Ramon Services District Reported Implementing Targeting/Marketing Program:

Dublin San Ramon Services District Met Targeting/Marketing Coverage Requirement:

NO

NO

Test for Condition 2

			Family	Family
Latest Year Survey Program to Start:	1998	Residential Survey Offers (%)		
Reporting Period:	03-04	Survey Offers > 20%	NO	NO

Test for Condition 3

Completed Residential Surveys

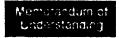
	Single Family	<u>Multi-</u> Family
Total Completed Surveys through 2004		
Credit for Surveys Completed Prior to Implementation of Reporting Database	84	10
Total + Credit	84	10
Residential Accounts in Base Year	6,087	875
Dublin San Ramon Services District Survey Coverage as % of Base Year Residential Accounts	1.38%	1.14%
Coverage Requirement by Year 7 of Implementation per Exhibit 1	7.90%	7.90%
Dublin San Ramon Services District on Schedule to Meet 10- Year Coverage Requirement	NO	NO



You are viewing coverage for: BMP 02 03-04







Back to Coverage Reports List

Best Management Practices Report Filing

BMP 02 Coverage: Residential Plumbing Retrofit

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 2 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet one of three conditions to satisfy strict compliance for BMP 2.

Condition 1: The agency has demonstrated that 75% of SF accounts and 75% of MF units constructed prior to 1992 are fitted with low-flow showerheads.

Condition 2: An enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts is in place for the agency's service area.

Condition 3: The agency has distributed or directly installed low-flow showerheads and other low-flow plumbing devices to not less than 10% of single-family accounts and 10% of multi-family units constructed prior to 1992 during the reporting period.

Test for Condition 1

		Singl	e-Family	Multi-Family			
Report Year	Report Period	Reported Saturation	Saturation > 75%?	Reported Saturation	Saturation > 75%?		
1999	99-00						
2000	99-00						
2001	01-02						
2002	01-02	60.00%	NO	60.00%	NO		
2003	03-04	60.00%	NO	60.00%	NO		
2004	03-04	60.00%	NO	60.00%	NO		

Test for Condition 2

Report Year	Report Period	<u>Dublin San Ramon Services District has ordinance</u> requiring showerhead retrofit?
1999	99-00	
2000	99-00	
2001	01-02	
2002	01-02	NO
2003	03-04	NO
2004	03-04	NO

Test for Condition 3

Reporting P	Period: 03-04		
1992 SF Accounts	Num. Showerheads Distributed to SF Accounts	Single-Family Coverage Ratio	SF Coverage Ratio > 10%
5,000	1,000	20.0%	YES
1992 MF Accounts	Num. Showerheads Distributed to MF Accounts	<u>Multi-Family</u> Coverage Ratio	MF Coverage Ratio > 10%
750			NO



You are viewing coverage for: BMP 03





Memorandum of Understanding

Back to Coverage Reports List

Best Management Practices Report Filing

BMP 03 Coverage: System Water Audits, Leak Detection and Repair

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 3 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

Test for Conditions 1 and 2

Report Year	Report Period	Pre-Screen Completed	Pre-Screen Result	Full Audit Indicated	Full Audit Completed
1999	99-00	NO			NO
2000	99-00				
2001	01-02				•
2002	01-02				NO
2003	03-04	NO			NO
2004	03-04	NO			NO



You are viewing coverage for: BMP 04

03-04 **⊿** YRs

YRs DN - UP

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Memorandum of Understanding



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BMP 04 Coverage: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 4 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must be on track to retrofit 100% of its unmetered accounts within 10 years to be in compliance with BMP 4.

Test for Compliance

Total Meter Retrofits Reported through 2004

No. of Unmetered Accounts in Base Year

Meter Retrofit Coverage as % of Base Year Unmetered Accounts

Coverage Requirement by Year 6 of Implementation per Exhibit 1

42.0%

RU on Schedule to meet 10 Year Coverage

Requirement

YES



You are viewing coverage for: **BMP 05** 03-04





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Best Management Practices Report Filing

BMP 05 Coverage: Large Landscape Conservation **Programs and Incentives**

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request flied

Agency indicated "at least as effective as" implementation during report

No

Warning: The BMP 5 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet three conditions to comply with BMP 5.

Condition 1: Develop water budgets for 90% of its dedicated landscape meter accounts within four years of the date implementation is to start.

Condition 2: (a) Offer landscape surveys to at least 20% of its CII accounts with mixed use meters each report cycle and be on track to survey at least 15% of its CII accounts with mixed use meters within 10 years of the date implementation is to start OR (b) Implement a dedicated landscape meter retrofit program for CII accounts with mixed use meters or assign landscape budgets to mixed use meters.

Condition 3: Implement and maintain customer incentive program(s) for irrigation equipment retrofits.

Test for Condition 1

Year	Report Period	BMP 5 Implementation Year	No. of Irrigation Meter Accounts	No. of Irrigation Accounts with Budgets	Budget Coverage Ratio	90% Coverage Met by Year 4
1999	99-00	1	103			NA
2000	99-00	2				NA
2001	01-02	3				NA
2002	01-02	4	275			No
2003	03-04	5	365			No
2004	03-04	6	384			No

Test for Condition 2a (survey offers)

Select Reporting Period: Large Landscape Survey Offers as % of Mixed Use Meter Cll Accounts	03-04
Survey Offers Equal or Exceed 20% Coverage Requirement	NO

Test for Condition 2a (surveys completed)

Total Completed Landscape Surveys Reported through	2
Credit for Surveys Completed Prior to Implementation of Reporting Database	1

Total + Credit	3
CII Accounts in Base Year	428
RU Survey Coverage as a % of Base Year CII Accounts	0.7%
Coverage Requirement by Year of Implementation per Exhibit 1	6.3%
RU on Schedule to Meet 10 Year Coverage Requirement	NO

Test for Condition 2b (mixed use budget or meter retrofit program)

Report Year	Report Period	BMP 5 Implementation Year	Agency has mbx-use budget program	No. of mixed-use budgets
1999	99-00	1	NO	
2000	99-00	2		
2001	01-02	3		
2002	01-02	4	NO	
2003	03-04	5	NO ·	
2004	03-04	6	NO	
-			No. of mixed	No. of mixed use
Report Year	Report Period	BMP 4 Implementation Year	use CII accounts	Cil accounts fitted with irrig. meters
1999	Report Period 99-00	BMP 4 Implementation Year		fitted with Irrig.
				fitted with Irrig.
1999	99-00	1		fitted with Irrig.
1999 2000	99-00 99-00	1 2		fitted with Irrig.
1999 2000 2001	99-00 99-00 01-02	1 2 3	<u>accounts</u>	fitted with Irrig.
1999 2000 2001 2002	99-00 99-00 01-02 01-02	1 2 3 4	accounts 150	fitted with Irrig.

Test for Condition 3

Report Year	Report Period	BMP 5 Implementation Year	RU offers financial incentives?	No. of Loans	Total Amt, Loans
1999	99-00	1	NO		
2000	99-00	2			
2001	01-02	3			
2002	01-02	4	NO		
2003	03-04	5	NO		
2004	03-04	6	NO		
Report Year	Report Period	No. of Grants	Total Amt. Grants	No. of rebates	Total Amt. Rebates
1999	99-00				
2000	99-00				
2001	01-02				
2002	01-02				
2003	03-04				

2004

03-04



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coverage for: BMP 06

03-04

YRs

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Best Management Practices Report Filing

BMP 06 Coverage: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

Yes



Warning: The BMP 6 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

Memorandum of Understanding An agency must meet one condition to comply with BMP 6.

Condition 1: Offer a cost-effective financial incentive for high-efficiency washers if one or more energy service providers in service area offer financial incentives for high-efficiency washers.

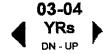
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Test for Condition 1

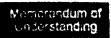
Year	Report Period	BMP 6 Implementation Year	Rebate Offered by ESP?	Rebate Offered by RU?	Rebate Amount
1999	99-00	1	YES	YES	75.00
2000	99-00	2			
2001	01-02	3			
2002	01-02	4	NO	NO	
2003	03-04	5	YES	NO	
2004	03-04	6	YES	NO	
<u>Year</u>	Report Period	BMP 6 Implementation Year	No. Rebates Awarded	Coverage	Met?
1999	99-00	1		YES	;
2000	99-00	2			
2001	01-02	3			
2002	01-02	4		YES	i
2003	03÷04	5		NO	
2004	03-04	6		NO	
•					



You are viewing coverage for: **BMP 07**



BMPs DN - UP



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BMP 07 Coverage: Public Information Programs

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

Warning: The BMP 7 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

Test for Condition 1

Year	Report Period	BMP 7 implementation Year	RU Has Public Information Program?
1999	99-00	2	YES
2000	99-00	3	YES
2001	01-02	4	
2002	01-02	5	YES
2003	03-04	6	YES
2004	03-04	7 .	YES



You are viewing

coverage for. **BMP 08** 03-04





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BMP 08 Coverage: School Education Programs

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 8 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8's definition.

Test for Condition 1

Year	Report Period	BMP 8 implementation Year	RU Has School Education Program?
1999	99-00	2	YES
2000	99-00	3	
2001	01-02	4	
2002	01-02	5	
2003	03-04	6	
2004	03-04	7	YES



You are viewing coverage for: **BMP 09** 03 - 04









Best Management Practices Report Filing

BMP 09 Coverage: Conservation Programs for CII Accounts

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 9 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet three conditions to comply with BMP 9.

Condition 1: Agency has identified and ranked by use commercial, industrial, and institutional accounts.

Condition 2(a): Agency is on track to survey 10% of commercial accounts, 10% of industrial accounts, and 10% of institutional accounts within 10 years of date implementation to commence. OR

Condition 2(b): Agency is on track to reduce CII water use by an amount equal to 10% of baseline use within 10 years of date implementation to commence. OR

Condition 2(c): Agency is on track to meet the combined target as described in Exhibit 1 BMP 9 documentation.

Test for Condition 1

Year	Report Period	BMP 9 Implementation Year	Ranked Com. Use	Ranked Ind. Use	Ranked Inst. Use
1999	99-00	1			
2000	99-00	2			
2001	01-02	3			
2002	01-02	4			
2003	03-04	5	YES	YES	YES
2004	03-04	6	YES	YES	YES

Test for Condition 2a

Year Cli Accounts

Institutional Commercial Industrial Total Completed Surveys Reported through 2004 Credit for Surveys Completed Prior to Implementation of Reporting **Databases** Total + Credit Cll Accounts in Base Year 397 31 RU Survey Coverage as % of Base

Coverage Requirement by Year 6 of Implementation per Exhibit 1	4.2%	4.2%	4.2%
RU on Schedule to Meet 10 Year Coverage Requirement	NO	NO	NO

Test for Condition 2a

Year	Report Period	BMP 9 Implementation Year	Performance Target Savings (AF/yr)	Performance Target Savings Coverage	Performance Target Savings Coverage Requirement	Coverage Requirement Met
1999	99-00	1			0.5%	NO
2000	99-00	2			1.0%	NO
	01-02	3			1.7%	NO
	01-02	4			2.4%	NO
2003	03-04	5			3.3%	NO
2004	03-04	6			4.2%	NO

Test for Condition 2c

Total BMP 9 Surveys + Credit

BMP 9 Survey Coverage

BMP 9 Performance Target Coverage

BMP 9 Survey + Performance Target Coverage

Combined Coverage Equals or Exceeds Coverage

Requirement?

NO



You are viewing coverage for:

BMP 11 03-04





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BMP 11 Coverage: Conservation Pricing

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 11 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet one condition to comply with BMP 11.

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing. Implementation methods shall be at least as effective as eliminating non-conserving pricing and adopting conserving pricing. For signatories supplying both water and sewer service, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

a) Non-conserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components: rates in which the unit price decreases as the quantity used increases (declining block rates);rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used; pricing in which the typical bill is determined by high fixed charges and low commodity charges.

b) Conservation pricing provides incentives to customers to reduce average or peak use, or both. Such pricing includes: rates designed to recover the cost of providing service; and billing for water and sewer service based on metered water use. Conservation pricing is also characterized by one or more of the following components: rates in which the unit rate is constant regardless of the quantity used (uniform rates) or increases as the quantity used increases (increasing block rates); seasonal rates or excess-use surcharges to reduce peak demands during summer months; rates based upon the longrun marginal cost or the cost of adding the next unit of capacity to the system.

Test for Condition 1

<u>Year</u>	Report Period	RU Employed Non Conserving Rate Structure	RU Meets BMP 11 Coverage Requirement
1999	99-00	NO	YES
2000	99-00	NO	YES
2001	01-02	NO	YES
2002	01-02	NO	YES
2003	03-04	NO	YES
2004	03-04	YES	NO



You are viewing coverage for:

BMP 12 03-04





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BMP 12 Coverage: Conservation Coordinator

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

Yes

Warning: The BMP 12 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

Test for Compliance

Report Year	Report Period	Conservation Coordinator Position Staffed?	Total Staff on Team (incl. CC)
1999	99-00		
2000	99-00		
2001	01-02		
2002	01-02		
2003	03-04	NO	
2004	03-04	YES	2



You are viewing coverage for:

BMP 13 03-04





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BMP 13 Coverage: Water Waste Prohibition

Reporting Unit:

Dublin San Ramon Services District

MOU Exhibit 1 Coverage Requirement

No exemption request filed

Agency indicated "at least as effective as" implementation during report period?

No

Warning: The BMP 13 form is not 100% complete for one or more report years. This may produce inaccurate results for this report.

An agency must meet one condition to comply with BMP 13.

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

Test for Condition 1

Agency or service area prohibits:

. <u>Year</u>	Gutter Flooding	Single-Pass Cooling Systems	Single- Pass Car Wash	Single-Pass Laundry	Single-Pass Fountains	<u>Other</u>	RU has ordinance that meets coverage requirement
1999							
2000							
2001							
2002							
2003	yes	no	no	no	yes	no	NO
2004	yes	no	no	no	yes	no	NO